

COMPETITIVE ENTRANCE EXAMINATION INTO HTTC BAMBILI	
<u>CYCLE:</u>1stCYCLE <u>LEVEL:</u> 1st <u>OPTION:</u> ECONOMICS	Session: 2014
DURATION: 3hrs	

Instructions: Answer all the questions in Section A and choose a Minor Paper in Section B; either **Geography** or **Mathematics**. Selecting the most appropriate answer and writing the corresponding letter (**A, B, C or D**) in the answer booklet provided. Make sure you insert the question paper inside the answer before you leave the examination hall. Time allowed 3hrs.

Section A: MAJOR PAPER: ECONOMICS

1- The concept of opportunity cost

- a) Suggests that all our wants can be achieved alternatively
- b) Would be irrelevant if we eliminate poverty alternatively
- c) Is relevant only for a capitalist economy like United States
- d) Suggests that a major increase in public health – care spending means an expansion in other areas will be difficult to achieve

2- Which of the following is an incorrect statement?

- a) A model is a deliberate simplification of reality
- b) A behavioral law is a piece of legislation set by government and tells people what they can and cannot do
- c) Data are pieces of evidence about economic behavior
- d) Cross – section data record at a point time show the way an economic variable differs across different individuals or groups of individuals

3- In a private enterprise community, the basic economic problem of ‘what goods shall be produced’ relies on.

- a) The government through taxes
- b) The spending habits of the citizens
- c) The invisible hand concept

- d) The use of private capital to produce high quality goods
- 4- If it is impossible to make somebody better off without making someone else worse off, then the current situation must
- a) Allocatively efficient
 - b) Not be optimal
 - c) Be inequality
 - d) Cures the problem of scarcity
- 5- Labor turnover implies
- a) Rate of change of labor force
 - b) Rate at which population qualifies to jobs labor force is trained
 - c) Endless movement of workers from job to job
 - d) Rate at which the labor force is trained

Questions 6 to 9 are based on the following information: the town of Bakassi has the following employment figure – total population = 320000, total employment = 120 000 and total unemployment = 80 000

- 6- What is the unemployment rate?
- a) 10%
 - b) 20%
 - c) 30%
 - d) 40%
- 7- What is labor participation rate?
- a) 50%
 - b) 56.25%
 - c) 62.5%
 - d) 70%
- 8- Now if half of the unemployed people stop looking for a job, what is the new employment rate?
- a) 10%
 - b) 12.5%
 - c) 25%
 - d) 33.33%
- 9- What is the new participation rate?
- a) 50%
 - b) 56.25%
 - c) 62.5%
 - d) 70%
- 10- The cyclical fluctuations in the agricultural sector in Cameroon is best described by the theory of:
- a) Agri – trade cycles

b) The Theory of the fluctuation and growth of products

c) The cobweb theory

d) Seasonal changes in weather conditions

11- The diminishing marginal rate of substitution refers to:

a) One good that is substituted for another when relative prices change

b) Consumer's preference for a good diminishes with each successive unit consumed

c) Holding total utility constant, diminishing qualities of one good must be sacrificed to obtain successive equal increases in the quality of the other good

d) A quality of one good that a consumer must sacrifice to increase the quality of the other without changing total utility

12- If the cross – price elasticity of demand between two goods is – 4, then

a) The two goods are complements

b) The two goods are substitutes

c) The two goods are normal

d) The two goods are unrelated

13- When all prices and income increase by the same percentage, the quality of good X demanded will:

a) Increase if only X is a normal goods

b) Always remain the same

c) Increase only if X is an inferior goods

d) Always increase

14- The supply curve of a company in perfect competition in the short – run is:

a) Average fixed cost curve

b) Marginal cost curve above average variable cost

c) Marginal cost curve above marginal revenue

d) Average total cost above marginal cost

15- A firm's variable cost

- a) Directly reflect the price of the firm's output
- b) Are dependent upon the level of fixed cost in the long run
- c) Are always equal to the firm's total average cost in the long run
- d) Are determined by quality of output produced by the firm

16- Which of the following necessarily declines continuously in the short run as output increases?

- a) Marginal cost
- b) Average variable cost
- c) Average fixed cost
- d) Price equal to average fixed cost

17- One long – run result of perfect competition is:

- a) Inefficient production
- b) Price equal to average fixed cost
- c) Zero accounting profit
- d) Normal accounting profit

18- An incumbent firm is one that

- a) Is always in position in market
- b) Beats the other firm
- c) Cannot rival the other firms
- d) Supernormal firm

19- The market share among the firms exhibit normal distribution, this means that:

- a) All firms have the same market share
- b) Market shares of firms are at break – even
- c) Only normal profits are gained by firms
- d) Mean market share of each firm equal is variance

- 20- An entrepot is a place
- a) Where goods are imported
 - b) Where goods are exported
 - c) Where goods are imported and processed for export
 - d) Where goods are imported and re – exported without process
- 21- Which of the following growth rates best measure Cameroon's living standard?
- a) The annual rate of change in real government spending per capital
 - b) The annual rate of change in real GDP per capital
 - c) The annual rate of change in real GDP
 - d) The annual rate of change in nominal GDP
- 22- A decrease in government expenditure in a simple Keynesian model entails
- a) Increment in short – run equilibrium output
 - b) Reduction in potential output
 - c) Reduction in short – run equilibrium output
 - d) Increment in potential output
- 23- The circular flow of income setting
- a) Is always in balance
 - b) Shows the withdrawals must equal investment for an equilibrium level of nominal income
 - c) Ignores foreign trade for simplicity
 - d) Shows that withdrawals must equal injections for an equilibrium level of national income
- 24- The moral suasion of the central bank to commercial banks is:
- a) Best at inflation
 - b) Best during demand push inflation
 - c) Best at supply push inflation

d) None of the above

25- Is not a measure of restricting imports in Cameroon

a) Import licensing

b) Subsidies

c) Tariffs

d) Import tax exoneration

26- In a Keynesian macro – model, as national income exceeds aggregate expenditure:

a) Firms experience unexpected increases in their inventories

b) Firms find their inventories decreasing rapidly

c) Inflationary pressure exist

d) The desired investment exceeds desired savings to cause inflation

27- Is regarded as a withdrawal from the circular flow of income

a) A rise in public investment

b) A surplus on the balance of payments

c) A budget deficit

d) A deficit on the balance of payment

28- The income of Director of ENS rises from 15000 frs to 17 000frs and his savings rises from -100 to 300frs, therefore his MPC will be:

a) 0.20

b) 0.90

c) 0.80

d) 0.60

29- Assume the demand for money depends on the interest rate therefore a 20% increase in the money supply will increase

a) Nominal GDP by 20%

b) Nominal GDP by more than 25%

c) Real GDP by 40%

d) Nominal GDP by less than 20%

- 30- The demand for real money balances will reduce because of
- a) A fall in real income
 - b) A fall in the interest rates
 - c) A fall in the general price level
 - d) A rise in the general price level
- 31- The major component of the money supply (M1) is
- a) Gold certificates
 - b) Demand deposits
 - c) Paper money in circulation
 - d) Coins
- 32- The bank rate is the rate of interest at which:
- a) The central bank lends to large commercial banks
 - b) The Central bank lends to large corporations
 - c) The commercial bank lends to large corporations
 - d) Saving and loans associations lend to indigenes
- 33- Is the most liquid asset at UBa bank's balance sheet
- a) Deposits with the central bank
 - b) Notes and coins in till
 - c) Customers' deposit account
 - d) Customers' current account
- 34- Bilateral aid is:
- a) Technical aid from IMF
 - b) Loan at bankers' standards
 - c) Assistance from one country to another
 - d) Aid with payment in inconvertible currency
- 35- Overvaluing the domestic currency relative to foreign currency entails
- a) Discouraging import substitution and export

b) Encouraging exports and discouraging import

c) Always leading to a balance of trade

d) Creating a trade surplus in the local

36- The welfare effects of a quota depend to a considerable extent upon

a) Who has the quota license

b) The size of the quota

c) Elasticities of domestic demand and supply

d) All of the above

37- Multinational corporations always

a) Produce goods

b) Produce primary or manufactured goods

c) Produce manufactured goods

d) None of the above

38- The main reason of exchange equalization is to:

a) Smooth fluctuations in a country's exchange rate

b) Finance a balance of payment deficit

c) Increase the size of a country's foreign exchange reserve

d) Facilitate the international exchange of goods and services

39- The terms trade are:

a) Provisions of international trade legislation

b) The rates at which goods Gabon will exchange for those of Cameroon

c) A country marginal rate of transformation

d) Set by the World Trade Organization

40- A consumer consuming one goods is:

a) Always in equilibrium

b) When price equates marginal utility

c) In equilibrium when more is consumed

d) All of the above

SECTION B: MINOR PAPER GEOGRAPHY

1. The study of landforms, involving their origin, nature, history and processes that continually shape them in time and space on the earth's surface is referred to as:
 - a) Geography
 - b) Geomorphology
 - c) Geosciences
 - d) Geomorphic processes
2. Which of the following constitutes the common forms of rocks on the earth's surface
 - a) Basalt
 - b) Rhyolite
 - c) Granite
 - d) Gabbro
3. The correct sequence of the layers of the earth starting from the interior is
 - a) Core, mantle, atmosphere
 - b) Core, mantle core
 - c) Crust, mantle, core
 - d) Sima, siae core
4. Relatively small topographic units rising as 900m above the surrounding ocean floor are generally called:
 - a) Mid – ocean ridges
 - b) Abyssal plains
 - c) Abyssal hills
 - d) Guyots
5. The act of old basalt giving room to new basalt best describes:

- a) Seafloor spreading
 - b) Continental drift
 - c) Plate tectonics
 - d) Isostasy
6. Lava that flows over a long distance after a volcanic eruption is:
- a) Viscous
 - b) Fluid
 - c) Acidic fluid
 - d) None of the above
7. The two main criteria of climate classification according to Koppen are
- a) Temperature and clouds
 - b) Temperature and weather
 - c) Temperature and location
8. Which of these is not a glacial deposit?
- a) Erratic
 - b) Drumlins
 - c) Moraines
 - d) Impeded dunes
9. Deltas are sediments deposits when:
- a) Hail melt
 - b) Maintain erupt
 - c) A river enters a standing body of water
 - d) Water evaporates from standing lake
10. Is not a factor that influence agriculture
- a) Climate
 - b) Tradition
 - c) Demand

d) Corn

11. Stream discharge is best defined as

- a) The width, the depth and velocity of water in the channel
- b) The volume of water passing through the channel in a given period of time
- c) The water measured in cubic metres per second in a channels
- d) The available water in a stream channel that flows in the sea

12. It is the name given to the total area drained by a stream and its tributaries

- a) Water divide
- b) Water shed
- c) Drainage divide
- d) Drainage basin

13. The relationship of the law of stream volume and rank of stream is:

- a) Constant
- b) Negative
- c) Positive
- d) Fluctuating

14. The earth's population is unevenly distributed mainly due:

- a) People tend to form restrictive groups
- b) Most climates cannot support life
- c) People must live near a water body in order to survive
- d) Natural obstacle greatly restrict where people can live

15. It is a long term demographic impact of a war on the population structure:

- a) Decrease in birth and death rate
- b) Baby boom
- c) Baby dust
- d) Economic hardship

16. The population of a town in Cameroon is 1 000 000 people and there 5 000 deaths, what is the crude death rate?
- a) 50%
 - b) 500%
 - c) 1000%
 - d) 100%
17. Necessity is the mother of invention, this is associated to:
- a) Rev. Thomas Malthus
 - b) Esther Boserup
 - c) Beanour Garmer
 - d) Edward Ulman
18. Is not an indicator of the socio – economic consequence of an ageing population:
- a) Increase in retirement age
 - b) Decrease in social security systems for the old
 - c) Increase in state expenditure
 - d) Shortage of labor
19. The inverse distance law is associated to the following:
- a) A Gravity model
 - b) G. K. Zipt
 - c) Edward Ulman
 - d) Raveinstein
20. The relative humidity of air at condensation level is:
- a) 50%
 - b) 0%
 - c) 79%
 - d) 100%

SECTION C: MINOR PAPER MATHEMATICS

1. The length of the line joining the points E(-2,3) and F(4,3) is:

- a) 5 b) 6 c) 7 d) 3

2. The gradient of the line joining C(5,-11) and D(-1,3)

- a) $\frac{5}{3}$
b) $-\frac{7}{3}$
c) $\frac{1}{5}$
d) $-\frac{5}{11}$

3. The equation of the line given its gradient 3 passing through the point G(-2,5) is:

- a) $3x - y - 11 = 0$
b) $5x - y + 9 = 0$
c) $7x - y + 11 = 0$
d) $3x + y + 11 = 0$

4. The intersection of the following pairs of lines $y + 5x + 2 = 0$ and $y = 3x - 1$ is:

- a) $(-\frac{5}{3}, -\frac{7}{2})$
b) $(-\frac{3}{2}, -\frac{11}{2})$
c) $(\frac{11}{7}, -\frac{13}{7})$
d) $(\frac{3}{2}, \frac{11}{2})$

5. The gradient function of the curve $y = 3x^7$

- a) 8 b) 2 c) 5 d) $\frac{5}{2}$

6. The coordinates of the curve $y = 5 + 9x - 7x^2$ where the gradient is zero is:

- a) (0.64, 7.8)
b) (7.8, 0.64)
c) (0.42, 7.9)
d) (0.78, 0.8)

7. The value of x for which the derived function $\frac{dy}{dx} = \frac{1}{2}x + 3$ is zero and the corresponding graph has the highest or the lowest point for x is:
- a) -6, lowest
 - b) 6, lowest
 - c) -8, highest
 - d) 8, highest
8. Given $y = x^3 - x^4 - 1$, when $x = 2$, the value y will take is:
- a) Maximum
 - b) Minimum
 - c) Negative
 - d) Positive
9. The area of the segment cut off from $y = x^2 - 4x + 6$ by the line $y = 3$ is
- a) 1.33
 - b) 4.5
 - c) 2.33
 - d) 3.33
10. Seven boys and two girls are to sit together on a bench for the ENS entrance.
In how many ways can they arrange themselves so that the girls do not sit next to each other?
- a) 282 420
 - b) 40 320
 - c) 362 880
 - d) 6720
11. The length of the line joining the point A(4,6) and B(9,15) is:
- a) 12.9
 - b) $\frac{7}{5}$

c) $\frac{1}{5}$

d) $\frac{1}{4}$

12. The length of the line joining the point A(1,2) and B(5,2) is:

a) 4

b) 6

c) 5

d) 2

13. The equation of the line given its gradient 4 passing through the point (1,3) is:

a) $4x - 2y - 1 = 0$

b) $4x - y - 1 = 0$

c) $4x - 4y - 2 = 0$

d) $6x - 2y - 1 = 0$

14. The intersection of the following pairs of lines $x + y = 0, y = -7$ is:

a) (7,-7)

b) (-5,5)

c) (-3,4)

d) (-7,7)

15. The gradient function of the curve $y = 3x^7$ is:

a) $12x^5$

b) $21x^6$

c) $3x^6$

d) $y = 21x^6$

16. The coordinates of the curve

$y = x^2 + 5x - 2$, Where the gradient is zero is:

a) (-2.5, -7.5)

b) (-2.5, -8.25)

c) (0.75, -8)

d) (5,4)

17. The value of x for which the derived function $\frac{dy}{dx} = 2x - 5$ where the gradient is zero and the corresponding graph has the highest or the lowest point for x is:

a) -1.5, lowest

b) 2.5, lowest

c) 2.5, highest

d) None of the above

18. Given $y = x^3 - x^4 - 1$, where $x = \frac{3}{4}$ the value y will take is:

a) Maximum

b) Minimum

c) Negative

d) Positive

19. The area under $y = 4x^3 + 8x^2$ from $x = -2$ to $x = 0$ is:

a) 4.5

b) 5.5

c) 6.5

d) 7.5

20. In how many ways can 4 letters of the word BRIDGE be arranged in a row, if no letter is repeated?

a) 720

b) 360

c) 24

d) 420